

Future Water Committee

Water Policy Committee

AGAI Public Comment on HJ 40 -- Proposed Bill Draft PD 0006

To: Water Policy Interim Committee

From: AGAI

RE: PD 0006

Date: 8/27/2020

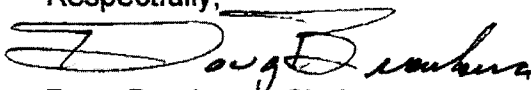
AGAI strongly supports the proposed policy on weather modification outlined in PD 0006. The Gallatin Valley is seeing continued extensive growth. In addition to development pressures, AGAI's irrigator members are facing challenges with shifting seasons due to earlier warming and earlier runoff of our historic snow pack.

The ability to work with our neighbors to coordinate weather modification activities along with developing off stream storage is critical to the future of agriculture in the Gallatin.

PD 0006 proposes a reasonable process that provides environmental safeguards while still allowing for projects to move forward in a responsible manner. The economic return to Montana's businesses is significant with the ability to store water in snow in higher elevations, develop other storage options, and reduce hail damage to our agricultural crops, homes, and businesses.

Please introduce PD 0006 as a committee bill in the 2021 Legislative Session.

Respectfully,



Doug Braaksma, Chairman
Future Water Supply Committee

The mission of the Association of Gallatin Agricultural Irrigators is to be the guardian and advocate of the Gallatin River System through the protection of its historically decreed water rights.

WATER POLICY INTERIM COMMITTEE
Room 172, State Capitol Building
September 14-15, 2020
Public Comment
Jim Hagenbarth

These comments pertain to the Committee's analysis of weather modification asked for via HJ 40 and the related weather modification legislation (PD0006).

The information submitted to the Committee on weather modification was all inclusive from outlining previous legislative history, past uses in Montana, 1993 restrictive legislation, and an understanding of the current technology practiced by many surrounding states and its efficacy. As evidenced by the footnotes in the report the committee and staff gained an understanding of the past, present and potential future of cloud seeding in the state. This report was well done and will certainly enlighten the legislature on the sight specific potential of increasing precipitation for the benefit of all users and abating damage in susceptible areas. Water is our most precious commodity and Montana is missing an opportunity to benefit from the moisture laden clouds that often pass us by.

With the benefit of this study the Committee has drafted legislation that will again precipitate Montana's ability to take advantage of this beneficial tool. PD0006 was based off the original weather modification legislation with changes made to reconcile the negative impacts of the 1993 legislation and reflects the benefits of improved cloud seeding technology. It allows any qualified entity to participate, requires only a license, and an environmental assessment similar to an activity with little environmental impact. The department adopts rules to ensure the participating entity meets stringent qualifications, responsibilities and develops suspension guidelines to limit risk and liability. The license requires a full disclosure of the entities involved, purpose, time periods, areas and materials used. A notice of intention must have published public notice and applicant must provide proof of insurance. Termination clauses are included along with yearly operation records and reports. This legislation is adequate, has safeguards, is transparent and will allow entities to develop site specific applications of weather modification technology for the benefit of all water users. Additional snowpack in our mountains has the greatest potential impact. I thank the Committee and staff for their diligence in studying and understanding weather modification.

From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Tuesday, September 08, 2020 1:20:51 PM

Comments for WPIC

Date: 8th September 2020 13:20

Full Name:
Daniel Drummond

Email Address:
daniel.drummond@umconnect.umt.edu

Subject Line:
HJ-40

Your Comment:
Even though cloud-seeding is relatively harmless to the environment, I do not think it is right for humans to mess with the environment besides to stop the climate frok changing at the rate at which it is currently.

Sent via www.leg.mt.gov/committees/interim/2019wpic/meeting-info/

From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Tuesday, September 01, 2020 10:33:42 AM

Comments for WPIC

Date: 1st September 2020 10:33

Full Name:
Gabriella Eaton

Email Address:
gabriellane22@gmail.com

Subject Line:
HJ40

Your Comment:

To whom it may concern, After reading the HJ40 report on seeding clouds, I am left with a few questions and thoughts to share. I am curious as to why climate change wasn't mentioned at all in this report? In my experience in learning about cloud seeding, it has been discussed on whether its' use in the context of climate change is ethical for a few reasons. By using technological modifications to our atmosphere and local climates, we may ignore the need for behavioral change on a systemic scale in the context of global climate change. Greenhouse gas emissions cause possible increases in storm intensity and increased temperatures which overall could cause a reduction in annual water availability and snowpack decreases. The use of cloud seeding to reduce these symptoms we may experience due to global climate change seems like a short term solution to a complex global problem that isn't currently being addressed in the US on a national level. Solutions like cloud seeding should only be used as a last resort. This topic sheds light on an important question. Who owns the atmosphere and therefore has the right to change it? Who gets to reap the benefits of cloud seeding? Most likely wealthier communities and countries will reap the benefits and we will further inequality in the US and around the world. The atmosphere doesn't have borders and we don't really know the long term impacts of spraying silver iodide into the atmosphere. Will it have negative impacts on some communities while benefiting others? Right now the way to address issues of increased severe weather, drought, and other climatic consequences is to implement climate adaption and mitigation in the US and as a global community. Thank you for your time, Gabriella Eaton

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Wednesday, September 02, 2020 11:07:10 PM

Comments for WPIC

Date: 2nd September 2020 23:07

Full Name:

Grayson

Email Address:

graysond.henshaw@gmail.com

Subject Line:

HJ40

Your Comment:

What are the consequences of controlling and manipulating the Earth's natural rain cycle?
What are the consequences of heavy metals that fall into our water supply, crops, and even seep through the skin? How does this interact with HAARP and EMF frequencies? Weather modification can be a deadly weapon in the wrong hands.

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Monday, August 31, 2020 9:12:58 PM

Comments for WPIC

Date: 31st August 2020 21:12

Full Name:
Bowman Leigh

Email Address:
bowmanleigh@gmail.com

Subject Line:
HJ40 Study - Weather Modification (Cloud Seeding)

Your Comment:

To the Members of the WPIC, After reading the HJ40 draft report, "A Study of Weather Modification," I am struck by the lack of conclusive scientific evidence indicating the safety of using silver iodide and dry ice in weather modification techniques. While, based on the report, statistical evidence points to "success" in terms of increase in snowfall, the environmental impact of these techniques is left uncertain. Considering the importance many Montanans assign to maintaining healthy ecosystems, particularly when it comes to tourism, recreation, etc., providing compelling evidence that these methods are environmentally-friendly is, I believe, necessary for public buy-in to this bill. I urge you to take the necessary precautions to ensure that weather modification does not harm Montana's ecosystems for the sake of increased precipitation. Thank you for your consideration, Bowman Leigh

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Monday, August 31, 2020 10:57:10 PM

Comments for WPIC

Date: 31st August 2020 22:57

Full Name:

Callie Ling

Email Address:

kookykaleidscope720@gmail.com

Subject Line:

Weather modification

Your Comment:

What are some poor side effects of cloud seeding? Will "seeding" more water and snow and reducing hail have an affect on the overall weather system outside of the targeted area? Also is shooting silver iodide into the air safe in the respect of chemical balance?

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Tuesday, September 01, 2020 12:31:09 AM

Comments for WPIC

Date: 1st September 2020 00:31

Full Name:
Sam Mothner

Email Address:
sammothner@gmail.com

Subject Line:
HJ40

Your Comment:

I think that cloud seeding is a smart way to help with the availability of water year round but I do have a few questions. first, what is the affect of putting silver iodide in the atmosphere? Also, how would too much precipitation be managed? Could this lead to increased flooding in the spring with runoff? Would there be a public notice before there was cloud seeding done? Would scientific reports and studies be available to the public so they can see that it is not "chemtrails"?

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Monday, August 31, 2020 10:30:55 PM

Comments for WPIC

Date: 31st August 2020 22:30

Full Name:
Stephanie Nikkila

Email Address:
SteffiNikkila@gmail.com

Subject Line:
HJ40: Seeding Clouds

Your Comment:

I think this is a real interesting idea. However, does this make humans the "Gardeners of the Earth" rather than it's humble citizens? Is this potentially crossing a line we can't come back from?

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Monday, August 31, 2020 1:30:35 PM

Comments for WPIC

Date: 31st August 2020 13:30

Full Name:
Timothy Seegraber

Email Address:
Tseegraber@gmail.com

Subject Line:
Altering Weather with Science

Your Comment:

Members of WPIC, I believe that the "seeding of clouds" is a revolutionary idea and if implemented properly will reap many benefits in future years to come. I do have some concerns for the project however. According to the HJ 40 it does not state that there has been very many experiments or practical test runs put into the technology thus far. I also have a hunch that once this idea if more publicized there will be backlash from individuals who believe creating weather is unethical. From my points of view, as long as the substance is safe (as silver iodide is) there is no problem with implementing it. The fact that the DNRC has strict guidelines for those attempting to acquire a license and a permit is also a good sign. Although more scientific trials and studies should go through before any permits are given out. With proper planning and implementation tactics I believe this could be a great resource for our state. Thank you very much.

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From: webmaster@localhost.legmt.gov
To: [Mohr, Jason](#)
Subject: Public Comment Submission for WPIC
Date: Monday, August 31, 2020 9:11:28 PM

Comments for WPIC

Date: 31st August 2020 21:11

Full Name:

Mak Sisson

Email Address:

makenziesisson@gmail.com

Subject Line:

Concerns on Water Rights for HJ 40

Your Comment:

I have concerns for the legality and ethics of the proposed plans to attempt seeding clouds. The point of seeding clouds is to induce a sort of control over the natural hydro-logic processes that govern water in the west. This is admirable, especially considering the shrinking supply of available freshwater for commercial and industrial use. We need to be looking towards solutions for this problem, which is coming very fast, and has no easy fix. However, I do worry about the ethics of this process. If a group can gain the right to seed these clouds through purchase of a license and were able to convince the DNRC that their use would be viable and beneficial for Montanan citizens, could they gain a power that could harm the citizens of another state, who may lose out on the rainwater that was just seeded for Montanans? What mandates a "knowledge of meteorology" required for a license? How large are the geographical areas that one covers with a single seeding? With any attempt to control water and alter its flow, whether on the ground or in the air, there is always the fear of removing a resource from an area that depends on it. I hope this will not be the case, but I worry for the case that could be brought against this practice.

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